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REMARKS

Upon entry of this Response, claims 1-20 remain pending in the present patent application. Applicant respectfully requests reconsideration of the pending claims in view of the following remarks.

In item 2 of the Office Action, claims 1-20 have been rejected under 35 U.S.C. §103(a) as being unpatentable over U.S. Patent 6,012,087 issued Freivald et al. (hereafter "Freivald"). A prima facie case of obviousness is established only when the prior art teaches or suggests all of the elements of the claims. MPEP §2143.03, In re Rijckaert, 9 F.3d 1531, 28 U.S.P.Q.2d 1955, 1956 (Fed. Cir. 1993). For the reasons that follow, Applicant asserts that Freivald fails to show or suggest each of the elements of claims 1-20. Accordingly, Applicant requests that the rejection of these claims be withdrawn.

To begin, claim 1 provides as follows:

1. A network update tracking system in a server, comprising:

a processor circuit having a processor and a memory; a list of variables, tags, or attributes stored in a

database;

As set forth above, claim 1 recites the fact that a list of variables, tags, or attributes are stored in a database. Also, the update detection logic of claim 1 includes logic that detects a number of updates to <u>portions</u> of a corresponding number of network sites. The portions for which updates are detected are unassociated with one of the variables, tags, or attributes. In this respect, the variables, tags, or attributes stored in the database indicate those portions of the network sites that include dynamic content that changes frequently such as advertisements. As such, knowledge of updates to such dynamic content is presumably of little use to a user. With respect to claim 1, the Office Action states in part:

"Though Freivald discloses a database with a history table, which database stores a plurality of records, (Col. 4, lines 9-64), Freivald

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does not specifically enumerate the storage of a specific list of variables, tags or attributes wherein updates are not made to portions of a site associated with one of the variables, tags or attributes, (per newly amended Claims 1, 7, 13 & 17). It would have been obvious to one of ordinary skill in the art at the time of invention by Applicant to specifically store a list of "variables, tags or attributes" for purposes of limiting updated material within the Freivald database for several reasons. Primarily, the Freivald database teaches the storage of URL/web page information, which information is obviously inclusive of all variables, tags or attributes comprising the same. Additionally, Freivald teaches comparison of web page information for updating purposes wherein "changes in the web page that are not unique but match an earlier version of the web page do not notify the remote client", (Col. 4, lines 41-43). In other words, Examiner finds that Freivald clearly and obviously teaches an update detection means wherein changes to a webpage are distinguished. The motivation to have specific webpage qualities stored, (variables, tags and attributes), for detection/ comparison/update purposes, is also found within Freivald which enumerates a need for "a change-detection tool that does not report changes that are not relevant to the user", (Col. 4, lines 2-4), wherein categorization via the use of specific variables, tags and attributes for change-detection would have been obvious as a means for quick identification of web-related information already stored within the database (per the teachings of Freivald). Thus, Newly Amended Claims 1, 7, 13 & 17 and Original Claims 2, 8, 14 & 18 are found to be unpatentable over considerable consideration of the teachings of Freivald." (Office Action, item 4. pages 3-4.)

Applicant respectfully disagrees. Freivald shows or suggests a change detection system that employs a signature-based approach to determining whether changes to a network page have occurred. Signatures of pages are generated such as checksums or other signatures. When a prior stored signature matches a newly generated one from a given web page, then no change has occurred, or the web site merely displays an old version that has presumably already been viewed, or the web site may be down, etc. The problem as noted by Freivald in such an approach is that when too many change notices are generated because of dynamic content in a web page, then various approaches are employed to ensure that new change notices are not sent for each change in the dynamic content of the web page. In this respect, Freivald states in part:

"When too many change notices are being generated, the software automatically switches the method of change detection to try and reduce the frequency of notifications. When successful, frequent changes in dynamic content can be ignored, while change to the

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underlying static page still generate change notices. The last-modified header can be used for detection rather than signature-matching." (Col. 13, lines 4-10.)

In this respect, when too many change notices are triggered because dynamic content causes a signature generated from the web page to change too frequently, then Freivald suggests simply looking at the last-modified header to determine whether the web site has been changed based on update date or other information. However, assuming that no last-modified header can be found, then the signature base change detection is further employed and the problem of too many change notices being sent due to dynamic content is not addressed. Specifically, at col. 13, lines 29-34, Freivald states:

"When step 92 determines that the detect-tracker field exceeds the threshold value, then the web page is fetched and the last-modified header is examined. If no last-modified header is found, step 91, then signature-based change detection is left Intact, even though many notifications may have been generated." (Col. 13, lines 29-34.)

In this respect, *Freivald* fails to provide an adequate solution to the problem of too many change notices. Also, in the above passage, *Freivald* teaches away from the concept of using variables, tags, or attributes associated with various portions of web pages or other network pages in order to indicate whether such portions should be ignored as provided by in the instant claims. Rather, *Freivald* leads one to believe that there is no solution to the basic problem of too many change notice transmissions if there is no last-modified header in the particular web site.

By use of the variables, tags, or attributes, dynamic content may be reliably avoided in determining whether a particular network page or site has changed. Thus, greater intelligence is applied to the detection of changes in web pages than is described by *Freivald*. As a result, a greater advantage is provided in that the present invention makes possible more reliable detection of changes of content of a web site that is of interest to a user.

Accordingly, Applicant asserts that the rejection of claim 1 is improper. Therefore, Applicant requests that the rejection of claim 1 be withdrawn. In addition, Applicant requests that the rejection of claims 7, 13 and 17 be withdrawn to the extent that they detect updates to portions of network sites, where the portions are not associated with the variables, tags, or attributes stored in a database as set forth

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therein. In addition, Applicant requests that the rejection of claims 2-6, 8-12, 14-16, and 18-20 be withdrawn as depending from claims 1, 7, 13, or 17.

CONCLUSION

Applicant respectfully requests that all outstanding objections and rejections be withdrawn and that this application and all presently pending claims be allowed to issue. If the Examiner has any questions or comments regarding this Response, the Examiner is encouraged to telephone the undersigned counsel of Applicant.

Respectfully submitted,

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